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FILE 'HOME' ENTERED AT 12:52:37 ON 23 MAY 2003

L1          890 (BACTER###### (S) LYSATE) (P) (ADMINST###### OR VACCINE OR ENHAN
                C#### OR IMMUN######## OR ADJUVANT)

L12          10 L11 AND (MYCOBACTER##### OR LACTOBACCILUS OR BORDATELLA OR CORYN
                EBACTER#### OR STREPT######## OR HAEMOPHILUS)

> d his

     (FILE 'HOME' ENTERED AT 12:52:37 ON 23 MAY 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 12:53:14 ON 23 MAY 2003
L1           890 S (BACTER###### (S) LYSATE) (P) (ADMINST###### OR VACCINE OR EN
L2           288 S L1 AND (BACTER##### (A) LYSATE)
L3           153 DUP REM L2 (135 DUPLICATES REMOVED)
L4             4 S L3 AND MYCOBACTER####
L5            24 S TUBERCULOSIS (S) VACCINE AND LYSATE
L6            12 DUP REM L5 (12 DUPLICATES REMOVED)
L7            11 S L6 NOT L4
L8            87 S L1 AND LYSATE (S) VACCINE
L9            79 DUP REM L8 (8 DUPLICATES REMOVED)
L10           49 S L9 NOT PY>1999
L11           48 S L10 NOT (L4 OR L7)
L12           10 S L11 AND (MYCOBACTER##### OR LACTOBACCILUS OR BORDATELLA OR CO

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L7 ANSWER 1 OF 11 MEDLINE
AN 2002695426 MEDLINE
DN 22326291 PubMed ID: 12438325
TI Effect of Mycobacterium tuberculosis-specific 10-kilodalton antigen on macrophage release of tumor necrosis factor alpha and nitric oxide.
AU Trajkovic Vladimir; Singh Gyanesh; Singh Balwan; Singh Sarman; Sharma Pawan
CS Immunology Group, International Centre for Genetic Engineering and Biotechnology, Aruna Asaf Ali Marg, New Delhi 110067, India.
SO INFECTION AND IMMUNITY, (2002 Dec) 70 (12) 6558-66.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200301
ED Entered STN: 20021217
Last Updated on STN: 20030108
Entered Medline: 20030107
AB Secreted proteins of Mycobacterium **tuberculosis** are major targets of the specific immunity in **tuberculosis** and constitute promising candidates for the development of more efficient **vaccines** and diagnostic tests. We show here that M. tuberculosis-specific antigen 10 (MTSA-10, originally designated CFP-10) can bind to the surface of mouse J774 macrophage-like cells and stimulate the secretion of the proinflammatory cytokine tumor necrosis factor alpha (TNF-alpha). MTSA-10 also synergized with gamma interferon (IFN-gamma) for the induction of the microbicidal free radical nitric oxide (NO) in J774 cells, as well as in bone marrow-derived and peritoneal macrophages. On the other hand, pretreatment of J774 cells with MTSA-10 markedly reduced NO but not TNF-alpha or interleukin 10 (IL-10) release upon subsequent stimulation with lipopolysaccharide or the cell **lysate** of M. tuberculosis. The presence of IFN-gamma during stimulation with M. tuberculosis **lysate** antagonized the desensitizing effect of MTSA-10 pretreatment on macrophage NO production. The activation of protein tyrosine kinases (PTK) and the serine/threonine kinases p38 MAPK and ERK was apparently required for MTSA-10 induction of TNF-alpha and NO release, as revealed by specific kinase inhibitors. However, only p38 MAPK activity, not PTK or ERK activity, was partly responsible for MTSA-10-mediated macrophage desensitization. The modulation of macrophage function by MTSA-10 suggests a novel mechanism for its involvement in immunopathogenesis of tuberculosis and might have implications for the prevention, diagnosis, and therapy of this disease.

L7 ANSWER 2 OF 11 MEDLINE
AN 2000417686 MEDLINE
DN 20336492 PubMed ID: 10875795
TI In vitro measurement of protective mycobacterial immunity: antigen-specific expansion of T cells capable of inhibiting intracellular growth of bacille Calmette-Guerin.
AU Worku S; Hoft D F
CS Vaccine Treatment and Evaluation Unit, Department of Internal Medicine, Saint Louis University Health Sciences Center, St. Louis, MO 63110, USA.
NC NO1-AI45211 (NIAID)
NO1-AI45250 (NIAID)
SO CLINICAL INFECTIOUS DISEASES, (2000 Jun) 30 Suppl 3 S257-61.
Journal code: 9203213. ISSN: 1058-4838.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Priority Journals
EM 200009
ED Entered STN: 20000915
Last Updated on STN: 20000915
Entered Medline: 20000906
AB We investigated the ability of T cells expanded with mycobacterial antigens from healthy purified protein derivative-reactive donors and bacille Calmette-Guerin (BCG)-vaccinated volunteers to inhibit intracellular growth of BCG. Peripheral blood mononuclear cells were incubated for 7 days with mycobacterial whole **lysate**, live BCG, tetanus toxoid as control antigen, or medium alone. Autologous monocytes were separated by plastic adherence, allowed to mature for 6 days, and infected with BCG before serving as target cells. Expanded effector cells were cocultured with target cells for 72 h. Cocultures were then treated with 0.2% saponin to lyse infected monocytes and release intracellular BCG. Quantities of viable BCG present in these **lysates** were studied by colony-forming unit counting and radiometric labeling. We reproducibly found that lymphocytes expanded with mycobacterial whole **lysate** or live BCG significantly inhibited the intracellular growth of BCG, compared with lymphocytes expanded with tetanus toxoid or rested in medium. In addition, BCG vaccination enhanced the ability of T cells to inhibit intracellular mycobacterial growth in 3 of 5 volunteers. This assay may be useful for estimates of protective immunity induced by **tuberculosis vaccines** in human trials.

L7 ANSWER 4 OF 11 MEDLINE
AN 1999410035 MEDLINE
DN 99410035 PubMed ID: 10482309
TI A double-blind, placebo-controlled study of Mycobacterium-specific human immune responses induced by intradermal bacille Calmette-Guerin vaccination.
AU Hoft D F; Kemp E B; Marinaro M; Cruz O; Kiyono H; McGhee J R; Belisle J T; Milligan T W; Miller J P; Belshe R B
CS Department of Internal Medicine, Saint Louis University Health Sciences Center, Missouri, USA.
NC NO1-AI-25147 (NIAID)
NO1-AI-45250 (NIAID)
SO JOURNAL OF LABORATORY AND CLINICAL MEDICINE, (1999 Sep) 134 (3) 244-52. Journal code: 0375375. ISSN: 0022-2143.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199909
ED Entered STN: 19991005
Last Updated on STN: 19991005
Entered Medline: 19990922
AB Recent studies have indicated that type 1 T cell responses (potent interferon-gamma and cytolytic responses, with absence of interleukin-4 production) are important for protective immunity against mycobacteria. These observations suggest that assays of type 1 T cell responses may be useful as surrogate markers of protective immunity in the evaluation of new **tuberculosis vaccines**. To be useful as surrogate markers, immunologic assays must distinguish between vaccine recipients and control subjects in clinical trials. Previous studies have shown that bacille Calmette-Guerin (BCG) vaccination can induce human type 1 T cell responses, but randomized trials have not been done to determine whether measurement of these responses can distinguish between BCG recipients and control subjects. We have conducted a double-blind, placebo-controlled

trial of intradermal vaccination with two different BCG strains. We compared the mean lymphoproliferative, cytotoxic, Th1 and Th2 cytokine, and antibody responses detected in BCG and placebo recipients. These studies demonstrated that significant increases in Mycobacterium-specific T cell proliferative responses and type 1 cytokine responses were induced by BCG when compared with results with a placebo. In addition, BCG induced significant increases in Mycobacterium-specific antibody responses with an isotype profile characteristic of a type 1 cytokine bias. T cell and antibody assays involving the use of mycobacterial whole cell **lysates** or live BCG were able to discriminate between BCG and placebo recipients better than were assays using mycobacterial culture filtrates. These studies provide important information for the development of immunologic assays that might be useful as surrogate markers of protective immunity in future trials of new **tuberculosis vaccines**.

L7 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 2003:176644 CAPLUS
DN 138:253232
TI Lipoarabinomannan-reactive human secretory immunoglobulin A responses induced by mucosal bacille Calmette-Guerin vaccination
AU Brown, Robin M.; Cruz, Orlando; Brennan, Michael; Gennaro, Maria L.; Schlesinger, Larry; Skeiky, Yasir A. W.; Hoft, Daniel F.
CS Saint Louis University Vaccine and Treatment Evaluation Unit, Division of Infectious Diseases and Immunology, Department of Internal Medicine, Saint Louis University, St. Louis, MO, USA
SO Journal of Infectious Diseases (2003), 187(3), 513-517
CODEN: JIDIAQ; ISSN: 0022-1899
PB University of Chicago Press
DT Journal
LA English
AB The ability of 17 recombinant mycobacterial proteins, native antigen 85 complex, lipoarabinomannan (LAM), and Mycobacterium tuberculosis **lysate** to detect antibody responses induced by bacille Calmette-Guerin (BCG) vaccination and active tuberculosis infection were studied in enzyme-linked immunosorbent assays. Only LAM-reactive serum IgG responses were increased in both BCG-vaccinated patients and patients with active tuberculosis, and oral BCG vaccination also induced increase in LAM-reactive secretory IgA. LAM-reactive antibody assays can serve as markers of humoral and mucosal immunity in future trials of BCG and newer attenuated mycobacterial vaccines.
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS
AN 1997:48879 CAPLUS
DN 126:58859
TI Vaccination against superantigens without side effects using expression cassettes for the antigens
IN Dow, Steve W.; Elmslie, Robyn E.; Potter, Terence A.
PA National Jewish Center for Immunology and Respiratory Medicine, USA; Dow, Steve W.; Elmslie, Robyn E.; Potter, Terence A.
SO PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9636366	A1	19961121	WO 1996-US7432	19960520

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

US	5705151	A	19980106	US 1995-446918	19950518
US	5935568	A	19990810	US 1995-580806	19951229
AU	9658016	A1	19961129	AU 1996-58016	19960520
AU	704012	B2	19990401		
EP	850071	A1	19980701	EP 1996-914743	19960520

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI

JP	11508762	T2	19990803	JP 1996-535139	19960520
PRAI US	1995-446918	A	19950518		
US	1995-580806	A	19951229		
US	1995-484169	B2	19950607		
WO	1996-US7432	W	19960520		

AB A method of vaccinating against superantigens without the risk of toxic side effects from the antigens using expression cassettes for superantigen genes is described. The superantigen expression cassettes may be administered in combination with cassettes encoding cytokines or chemokines, depending upon the disease being treated. Antigens for use as adjuvants for use with such vector vaccines are also described. Expression of genes for a no. of superantigens (Staphylococcal enterotoxins A and B and toxic shock syndrome toxin) in CHO cells led to cell supernatants and cell **lysates** that strongly stimulated proliferation of PBMCs in culture. The genes were also expressed in melanoma cells and these cells continued to synthesize and secrete the antigens even after being made non-dividing by irradn.

L12 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 1999:107361. CAPLUS
DN 130:356974
TI The level of endotoxin contamination in biopreparations
AU Aleksandrowicz, Janina; Fiejka, Maria; Slowikowska, Maria; Marciniak-Rusek, Alina; Pass-Dziegielewska, Lidia
CS Dep. Sera Vaccines Control, Natl. Inst. Hyg., Warsaw, Pol.
SO Roczniki Panstwowego Zakladu Higieny (1998), 49(3), 293-298
CODEN: RPZHAW; ISSN: 0035-7715
PB Panstwowy Zaklad Higieny
DT Journal
LA English
AB This study was concerned with detection of the bacterial endotoxin as a contamination of various virus and bacterial **vaccines**. The LAL test (Limulus Amoebocyte Lysate) with S-2423 substrate was applied. The aim of the present study was to test the effects of some compds. included in **vaccines** (aluminum hydroxide, formaldehyde, and merthiolate) on development of color reaction in test between amebocyte **lysate**, endotoxin and chromogenic substrate; an attempt was made to det. the level of **bacterial** endotoxin in biopreparations. The level of endotoxins in virus **vaccines** with the limits defined in procedures certificate was adequate, the level of endotoxin was also low in virus **vaccines** of undefined requirements. The concn. of endotoxin in bacterial **vaccines** was differentiated. Considering the results of the current expts., as well as the fact, that the requirements for endotoxin contamination of bacterial **vaccines** are not available as it seems necessary to establish the limits for these group of biopreparations.
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2003 ACS
AN 1988:73768 CAPLUS
DN 108:73768
TI Industrial processes for the manufacture of ribosomal vaccines, and ribosomal vaccines so obtained
IN Dussourd D'Hinterland, Lucien; Normier, Gerard; Pinel, Anne Marie; Durand, Jacques
PA Fabre, Pierre, Medicament, Fr.
SO Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 238407	A1	19870923	EP 1987-400577	19870316
	EP 238407	B1	19920805		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	FR 2596064	A1	19870925	FR 1986-3829	19860318
	FR 2596064	B1	19900202		
	AT 79037	E	19920815	AT 1987-400577	19870316
	ES 2051759	T3	19940701	ES 1987-400577	19870316
	AU 8770093	A1	19870924	AU 1987-70093	19870317
	JP 01124396	A2	19890517	JP 1987-63656	19870318
PRAI	FR 1986-3829		19860318		
	EP 1987-400577		19870316		

AB **Bacterial** membrane proteoglycans, prepd. from clarified **lysates** of Klebsiella, Serratia, and **Corynebacterium** by treating the **lysate** supernatant with cetyltrimethylammonium or

trichloroacetic acid and sepg. the supernatant contg. purified proteoglycans, are mixed with **bacterial** ribosomal fractions, prepd. by treating a filtered, clarified **lysate** with MgCl2, org. acid, or cetyltrimethylammonium and recovering the ppt., for prepn. of ribosomal **vaccines**. K. pneumoniae Clarified lysate was treated with CTAB, the mixt. was centrifuged, and the supernatant was tangentially ultrafiltered through Millipore membranes (cutoff 10,000 daltons). The concd. suspension of proteoglycans was autoclaved and lyophilized. Crude ribosomal fractions from other **bacteria** were prepd. by tangential ultrafiltration (cutoff 0.22 .mu.) of **lysate** supernatant, treatment with 0.1M MgCl2 and HCl to pH 6.0, and centrifugation. The fractions were purified by washing with SDS, pptg. with EtOH, affinity chromatog., and ultrafiltration (cutoff 100,000 daltons). A **vaccine** against meningitis contg. Neisseria meningitidis group A ribosomes 3.5, N. meningitidis group C ribosomes 3.5, and K. pneumoniae membranous proteoglycans 15.0 .mu.g.

L12 ANSWER 3 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:364199 BIOSIS
DN PREV199900364199
TI Pneumococcal capsular polysaccharide preparations may contain non-C-polysaccharide contaminants that are immunogenic.
AU Yu, Xinhong; Sun, Yan; Frasch, Carl; Concepcion, Nelydia; Nahm, Moon H. (1)
CS (1) Department of Pediatrics, University of Rochester, 601 Elmwood Ave., Rochester, NY, 14642 USA
SO Clinical and Diagnostic Laboratory Immunology, (July, 1999) Vol. 6, No. 4, pp. 519-524.
ISSN: 1071-412X.
DT Article
LA English
SL English
AB We measured the capacity to opsonize **Streptococcus** pneumoniae serotype 6B and estimated the concentration of immunoglobulin G anti-6B capsular polysaccharide (PS) antibodies in 25 pre- and postimmune sera from adults **immunized** with a pneumococcal PS **vaccine**. We first studied two postvaccination serum samples displaying less opsonophagocytic capacity than expected. The majority of anti-6B antibodies in the two samples reacted with the capsular PSs of several unrelated serotypes (2, 4, 9V, 19F, and 23F) and with the **lysate** of noncapsulated S. pneumoniae **bacteria** but not with C-PS. The non-type-specific antibodies accounted for at least one-half of anti-6B antibodies in 40% of prevaccination sera and 10% of postvaccination sera from adults. The non-type-specific antibodies could be demonstrated in the enzyme-linked immunosorbent assays (ELISAs) for pneumococcal antibodies to other serotypes (4, 9V, 18C, 19F, and 23F). The nonspecific antibodies appear to bind a contaminant(s) in the current preparations of capsular PS. ELISA for antibodies to pneumococcal capsules may not be serotype specific for some samples.

L12 ANSWER 4 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:327567 BIOSIS
DN PREV199900327567
TI Molecular characterization and human T-Cell responses to a member of a novel **Mycobacterium** tuberculosis mtb39 gene family.
AU Dillon, Davin C. (1); Alderson, Mark R.; Day, Craig H.; Lewinsohn, David M.; Coler, Rhea; Bement, Teresa; Campos-Neto, Antonio; Skeiky, Y. A. W.; Orme, Ian M.; Roberts, Alan; Steen, Sean; Dalemans, Wilfried; Badaro, Roberto; Reed, Steven G.
CS (1) Corixa Corporation, 1124 Columbia St., Suite 200, Seattle, WA, 98104 USA

SO Infection and Immunity, (June, 1999) Vol. 67, No. 6, pp. 2941-2950.
ISSN: 0019-9567.
DT Article
LA English
SL English
AB We have used expression screening of a genomic **Mycobacterium** tuberculosis library with tuberculosis (TB) patient sera to identify novel genes that may be used diagnostically or in the development of a TB **vaccine**. Using this strategy, we have cloned a novel gene, termed mtb39a, that encodes a 39-kDa protein. Molecular characterization revealed that mtb39a is a member of a family of three highly related genes that are conserved among strains of M. tuberculosis and **Mycobacterium** bovis BCG but not in other **mycobacterial** species tested. **Immunoblot** analysis demonstrated the presence of Mtb39A in M. tuberculosis **lysate** but not in culture filtrate proteins (CFP), indicating that it is not a secreted antigen. This conclusion is strengthened by the observation that a human T-cell clone specific for purified recombinant Mtb39A protein recognized autologous dendritic cells infected with TB or pulsed with purified protein derivative (PPD) but did not respond to M. tuberculosis CFP. Purified recombinant Mtb39A elicited strong T-cell proliferative and gamma interferon responses in peripheral blood mononuclear cells from 9 of 12 PPD-positive individuals tested, and overlapping peptides were used to identify a minimum of 10 distinct T-cell epitopes. Additionally, mice **immunized** with mtb39a DNA have shown increased protection from M. tuberculosis challenge, as indicated by a reduction of **bacterial** load. The human T-cell responses and initial animal studies provide support for further evaluation of this antigen as a possible component of a subunit **vaccine** for M. tuberculosis.

L12 ANSWER 5 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1997:440285 BIOSIS
DN PREV199799739488
TI Outer membrane protein D15 is conserved among **Haemophilus** influenzae species and may represent a universal protective antigen against invasive disease.
AU Loosmore, Sheena M. (1); Yang, Yan-Ping; Coleman, Debbie C.; Shortreed, Jean M.; England, Diane M.; Klein, Michel H.
CS (1) Res. Centre, Pasteur Merieux Connaught Canada, 1755 Steeles Ave. W., North York, ON M2R 3T4 Canada
SO Infection and Immunity, (1997) Vol. 65, No. 9, pp. 3701-3707.
ISSN: 0019-9567.
DT Article
LA English
AB We have cloned and sequenced the d15 gene from two strains of **Haemophilus** influenzae type b (Hib) and two strains of nontypeable H. influenzae (NTHI). The nucleotide and deduced protein sequences of d15 are highly conserved, with only a small variable region identified near the carboxyl terminus of the protein. Analysis of upstream sequences revealed that the H. influenzae d15 gene may be part of a large potential operon of closely spaced open reading frames, including one with significant homology to the Escherichia coli cds gene encoding CDP-diglyceride synthetase. Southern blot analysis demonstrated that the d15 gene is also present in H. influenzae types a, c, d, e, and f and in **Haemophilus** parainfluenzae. A recombinant D15 (rD15) protein was expressed in good quantity in E. coli from the inducible T7 promoter, and monospecific anti-rD15 antibodies were raised. **Immunoblot** analysis of H. influenzae serotypes a, b, c, d, e, and f, NTHI, and H. parainfluenzae **lysates** revealed that they all expressed a cross-reactive D15-like protein. Purified rD15 was found to be highly **immunogenic** in mice, guinea pigs, and rabbits, and passive

transfer of anti-rD15 antibodies protected infant rats from challenge with H. influenzae type b or type a in infant rat models of **bacteremia** . Thus, D15 is a highly conserved antigen that is protective in animal models and it may be a useful component of a universal subunit **vaccine** against **Haemophilus** infection and disease.

L12 ANSWER 6 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1990:26851 BIOSIS
DN BA89:13817
TI PLASMID VECTORS FOR CONSTRUCTING TRANSLATIONAL FUSION TO THE B SUBUNIT OF CHOLERA TOXIN.
AU DERTZBAUGH M T; MACRINA F L
CS DEP. MICROBIOL. IMMUNOL., VA. COMMONWEALTH UNIV., RICHMOND, VA. 23298-0678.
SO GENE (AMST), (1989) 82 (2), 335-342.
CODEN: GENED6. ISSN: 0378-1119.
FS BA; OLD
LA English
AB A family of plasmid cloning vectors has been developed for creating translational fusions to the ctxB gene encoding the B subunit of cholera toxin (CTB) in Escherichia coli. These vectors permit insertion of transcriptionally and translationally competent gene sequences upstream from ctxB. To test the utility of the system, a portion of the glucosyltransferase B (GTF) gene (gtfB) from the cariogenic **bacterium Streptococcus** mutans GS-5 (Bratthall serotype c), encoding the N-terminal one-third of the protein, was inserted into each vector. E. coli **lysates** containing the constructs were partially purified by passage over a GM1 ganglioside affinity column. Western blotting analysis of the column retentate from one of the **lysates** revealed the presence of a novel 58-kDa protein which cross-reacted with antisera to GTF and CTB. These vectors are of general use for making other translational fusions to ctxB. The high binding affinity of CTB can be exploited in purifying large polypeptides fused to this relatively small protein. Moreover, these vectors can be used to create neoantigens with altered immunogenicity for use in polypeptide-based **vaccines**.

L12 ANSWER 7 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1988:71251 BIOSIS
DN BA85:37550
TI BIOLOGIC ACTIVITIES OF ANTIBODY TO A PEPTIDOGLYCAN-ASSOCIATED LIPOPROTEIN OF **HAEMOPHILUS**-INFLUENZAE AGAINST MULTIPLE CLINICAL ISOLATES OF **HAEMOPHILUS**-INFLUENZAE TYPE B.
AU GREEN B A; QUINN-DEY T; ZLOTNICK G W
CS PRAXIS BIOL., ROCHESTER, NEW YORK 14623.
SO INFECT IMMUN, (1987) 55 (12), 2878-2883.
CODEN: INFIBR. ISSN: 0019-9567.
FS BA; OLD
LA English
AB A peptidoglycan-associated lipoprotein of about 15 kilodaltons was purified from the outer membranes of **Haemophilus** influenzae by using nondenaturing detergents. To assess its **vaccine** potential, rabbit antiserum to the purified protein was obtained. The antiserum was specific for the peptidoglycan-associated lipoprotein in whole cell **lysates** of H. influenzae and was **bactericidal** for H. influenzae types a, b, d, e, and f and for 181 of 182 H. influenzae type b clinical strains isolated in widely dispersed geographic areas. The antibody protected infant rats from challenge with each of five clinical H. influenzae type b isolates and was additive to and did not interfere with **bactericidal** and protective activities of antibody against the type b capsule. These data indicate that the purified

peptidoglycan-associated lipoprotein is a potentially valuable **vaccine** candidate for H. influenzae type b disease and may **enhance** the effectiveness of preexisting anticapsular antibody.

L12 ANSWER 8 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1985:370448 BIOSIS
DN BA80:40440
TI INDUCTION OF PROTECTIVE IMMUNITY AGAINST SCHISTOSOMA-MANSONI BY A NONLIVING VACCINE 1. PARTIAL CHARACTERIZATION OF ANTIGENS RECOGNIZED BY ANTIBODIES FROM MICE IMMUNIZED WITH SOLUBLE SCHISTOSOME EXTRACTS.
AU JAMES S L; PEARCE E J; SHER A
CS DEP. MED., GEORGE WASHINGTON UNIV. MED. CENT., WASHINGTON, D.C.
SO J IMMUNOL, (1985) 134 (5), 3432-3438.
CODEN: JOIMA3. ISSN: 0022-1767.
FS BA; OLD
LA English
AB A single intradermal injection of frozen and thawed schistosomula in conjunction with the **bacterial adjuvant** **Mycobacterium** bovis strain BCG Phipps substrain (BCG) induced significant levels of resistance of challenge S. mansoni infection in C57BL/6 mice. **Immunization** with the aqueous fraction remaining after 100,000 .times. G centrifugation of the larval **lysate** was also protective under these conditions, suggesting that some **immunogenic** determinants may not be membrane associated. Frozen-thawed cercariae and soluble components of adult worms also protected against challenge infection in these experiments. Apparently, soluble **immunogens** are present in both early and late developmental stages of the parasite, and may be good candidate antigens for an immunochemically defined **vaccine** against schistosomiasis. Induction of humoral reactivity against soluble or membrane antigens was examined in mice protected against cercarial challenge by prior exposure to frozen-thawed larvae, soluble larval, or soluble adult antigens plus BCG. Animals that were **immunized** with frozen-thawed larvae produced low but significant levels of antibodies against larval surface antigens when examined by indirect immunofluorescence or by immunoprecipitation of surface-labeled schistosomula. Mice **immunized** with soluble antigens showed negligible antibody reactivity against surface membrane antigens. Because mice **immunized** with soluble antigens were resistant to challenge infection anti-surface membrane reactivity may not be required in the mechanism of protective **immunity** in this model. Sera from mice **immunized** with either total freeze-thaw larval **lysate** or soluble schistosome extracts all showed strong reactivity against soluble antigens, as detected by ELISA [enzyme linked immunosorbent assay]. Western blot analysis showed these antisera to react with a restricted number of high MW antigens that were present both in schistosomula and in adult worms. These antigens are likely to play a major role in the development of resistance in this model as **immunogens** and/or as targets of protective **immune** responses.

L12 ANSWER 9 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1982:281395 BIOSIS
DN BA74:53875
TI STUDY OF ENTERAL DYSENTERY VACCINES AND THEIR EFFICACY ON THE INTESTINAL LOOP MODEL IN RABBITS 2. CHANGES IN THE MUCOUS MEMBRANE OF THE SMALL INTESTINE IN RABBITS AFTER ORAL IMMUNIZATION WITH LIVE AND CHEMICAL VACCINES.
AU POLOTSKII YU E; RUKHAMINA M L; KRASNOPROSHINA L I; SELIVERSTOVA V G; KOLOMIETS O L; ELKINA S I; SERGEEVA G S; ALEKSEEVA I A
CS INST. EXP. MED., ACAD. MED. SCI. USSR, LENINGRAD, USSR.
SO ZH MIKROBIOL EPIDEMIOL IMMUNOBIOL, (1981) 0 (1), 89-94.

CODEN: ZMEIAV. ISSN: 0372-9311.
FS BA; OLD
LA Russian
AB Ten days after oral **immunization** of 3 groups of rabbits with live **vaccine** prepared from the mixture of **streptomycin** -dependent mutants of Shigella flexneri 2a and S. sonnei, with S. flexneri and S. sonnei tryptic **lysate** or with Boivin's extract of 6 S. flexneri and S. sonnei serotypes, a pronounced activation of the secretory and lysosomal apparatus was observed in ileac enterocytes. Deteriorating **bacteria** or their antigenic material were detected in phagolysosomes. An increased number of interepithelial lymphocytes and mucous membrane lymphocytes (plasmoblasts and plasmocytes) was observed. The surface of the contact of lymphocytic cell membranes with enterocytes was increased. Thus, special enterocytes with high pinocytic activity may play an important role in the uptake and transport of antigenic material. The fact that attenuated Shigella are destroyed in enterocytic phagolysosomes is emphasized.

L12 ANSWER 10 OF 10 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1976:207772 BIOSIS
DN BA62:37772
TI BACTERIOLOGICAL ACTIVITY IN UNFILTERED CALF SERA COLLECTED FOR TISSUE CULTURE USE.
AU ORR H C; SIBINOVIC K H; PROBST P G; HOCHSTEIN H D; LITTLEJOHN D C
SO IN VITRO (ROCKVILLE), (1975) 11 (4), 230-233.
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FS BA; OLD
LA Unavailable
AB Bacteriological tests were made on 24 lots of unfiltered calf serum collected for subsequent use as a component of tissue culture media. [Tissue cultures are often used to propagate viral **vaccines** intended for human **immunization**.] The examination included the isolation and identification of **bacteria**, assay of phages and demonstration of endotoxin material. Only gram-positive **bacteria** were isolated and 96% of the sera were contaminated with **bacteria** . The prevalent strains of **bacteria** found were Bacillus spp. and **streptococci**; 63% of the sera coagulated Limulus amoebocyte **lysate**. More than 90% of the lots contained phages demonstrable with the C-3000 strain of Escherichia coli. Only 1 lot of serum was found to be free from **bacteria**, phages and endotoxin by the tests used.